9. Improve lake edges to be fish, wildlife and people friendly. [For additional information regarding this objective, refer to pages 4-8 to 4-9 and 9-1 to 9-7 in the <u>Capitol Lake Adaptive Management Plan - 1999 to 2001</u> (1999).]

BACKGROUND

Capitol Lake was created in 1951 by filling portions of southern Budd Inlet. That fill now comprises Deschutes Parkway (from Tumwater to the dam), 5th Avenue west of Water Street, and the Capitol Lake dam. Later additions of fill for the basin include: Capitol Lake Park - now part of Heritage Park, Marathon Park, Interstate 5, Capitol Lake Interpretative Center, and Tumwater Historical Park. These fills have been protected by armoring (sometimes called riprap) along the new shoreline. A portion of the shoreline in the Tumwater Historical Park was repaired in the early 1990s after flooding from the Deschutes River damaged the park. One of the key features of Heritage Park was the construction of a concrete bulkhead to form the "Arc of Statehood". While these armored shorelines look neat and clean, they often dive steeply into the water and lack the shallows normally found along a lake which are beneficial to fish and wildlife.

Capitol Lake also contains sections of shorelines, that are relatively unchanged from when they were on the shores of Budd Inlet. These "high quality" shorelines are located on the east side of the Middle Basin (from the Steam Plant to I-5), the eastern shore of the South Basin (across from Tumwater Historical Park), and the western shore of Percival Cove. These shorelines are characterized by overhanging, native vegetation and are relatively undeveloped. Planted vegetation along the filled shorelines has been dominated by ornamental plants, turf grass, and hedges which provide very little fish or wildlife value. Over time, volunteer trees and aquatic vegetation have slowly improved the lake's habitat. However, landscaping efforts to keep these volunteer trees under control have highlighted the need for a comprehensive vegetation plan for Capitol Lake. Such a plan would clarify where volunteer trees and other types of native vegetation will be encouraged, and other areas where maintenance personnel will maintain a formal park-like setting.

It is likely that the North Basin of Capitol Lake and most of Heritage Park will be maintained in a formal park-like setting. However, there still may be opportunities to improve the aquatic habitat along these shorelines, which may have little effect on the visual character of the area. If permitted, dredged spoils from other parts of the lake may be placed along the shoreline to create shallow water areas. These shallows would be colonized by wetland and aquatic plants, and would be below the eye level of pedestrians walking along Deschutes Parkway or in Heritage Park. The southern portion of Heritage Park was planted to maintain vegetation along the water's edge.

It is also likely that the shoreline along the western shore of the Middle Basin, and the causeway across Percival Cove may be allowed to become more natural over time. Views of the Capitol will become less dominant, unless the vegetation is maintained to keep specific viewpoints from Deschutes Parkway. Also the February 2001 Nisqually earthquake caused a large landslide along the eastern shore of the South Basin across from Tumwater Historical Park, and along the dike in the Interpretive site. While looking "messy" both have added large woody debris to the shoreline and will not be cleaned up unless they pose a threat to health or safety.

As part of the Deschutes Parkway restoration, trees will be planted adjacent to the water along those portions where repairs include the lake edge. These trees will help improve the fish and habitat in those areas and will be planted in late 2002 or early 2003.

Activities in Years 2003 - 2005:

General Administration will need to hire a consultant to prepare a comprehensive vegetation plan for the shoreline of Capitol Lake. Operation and maintenance guidelines for GA employees are needed which incorporate the Integrated Pest Management (IPM) measures from Objective 12.

CLAMP Budget 2003 - 2005:

A comprehensive vegetation plan for Capitol Lake will cost approximately \$60,000. The cost of a maintenance and operation manual will be \$20,000.

Activities in Years 2005 - 2013:

The comprehensive vegetation plan along with the sediment habitat study from Objective 13 will direct improvements of shoreline habitat. These improvements will be completed over the span of four biennia, so that all major habitat vegetation is completed by the end of the 10 year plan.

CLAMP Budget 2005 - 2013:

Providing people, wildlife and fish friendly shoreline edges is estimated at \$950,000 for this period. This will include design, permitting, planting, and construction costs.



The shoreline of Deschutes Parkway provided little habitat when it was constructed, c. 1951. Courtesy of Susan Parish Collection.



Percival Cove provides good habitat with mature trees, overhanging vegetation and large woody debris in the water, c. 2001. Courtesy of Thurston Regional Planning Council.